



Patent  
Attorney Docket No. 030681-456

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

In-kyu PARK et al

Application No.: 10/727,660

Filing Date: December 5, 2003

Group Art Unit: 2671

Examiner: Unassigned

Confirmation No.: 7457

Title: METHOD OF PERCEPTUAL 3D SHAPE DESCRIPTION AND METHOD AND APPARATUS FOR  
SEARCHING 3D GRAPHICS MODEL DATABASE USING THE DESCRIPTION METHOD

**FIRST  
INFORMATION DISCLOSURE STATEMENT  
TRANSMITTAL LETTER**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Enclosed is a FIRST Information Disclosure Statement and accompanying form  
PTO-1449 for the above-identified patent application.

- ☒ No additional fee for submission of an IDS is required.
- ☐ The fee of \$180.00 (1806) as set forth in 37 C.F.R. § 1.17(p) is also enclosed.
- ☐ A statement under 37 C.F.R. § 1.97(e) is also enclosed.
- ☐ A statement under 37 C.F.R. § 1.97(e), and the fee of \$180.00 (1806) as set forth in 37 C.F.R. § 1.17(p) are also enclosed.
- ☐ Charge \_\_\_\_\_ to Deposit Account No. 02-4800 for the fee due.
- ☐ A check in the amount of \_\_\_\_\_ is enclosed for the fee due.
- ☐ Charge \_\_\_\_\_ to credit card. Form PTO-2038 is attached.

The Director is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17 and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in duplicate.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

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By

Charles F. Wieland III  
Registration No. 33,096

Date: April 13, 2004



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of	)	
In-kyu PARK et al	)	Group Art Unit: 2671
Application No.: 10/727,660	)	Examiner: Unassigned
Filed: December 5, 2003	)	Confirmation No.: 7457
For: METHOD OF PERCEPTUAL 3D	)	
SHAPE DESCRIPTION AND METHOD	)	
AND APPARATUS FOR SEARCHING	)	
3D GRAPHICS MODEL DATABASE	)	
USING THE DESCRIPTION METHOD	)	

**FIRST INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. § 1.56, the accompanying information is being submitted in accordance with 37 C.F.R. §§ 1.97 and 1.98.

All of the listed documents were previously mentioned in prior Applications Serial No. 60/430,974, filed December 5, 2002 and 60/510,147, filed October 14, 2003, upon which Applicants rely for the benefits provided in 35 U.S.C. § 120. In accordance with 37 C.F.R. § 1.98, a copy of each of the listed documents, is enclosed.

To assist the Examiner, the documents are listed on the attached form PTO-1449. It is respectfully requested that an Examiner initialed copy of this form be returned to the undersigned.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

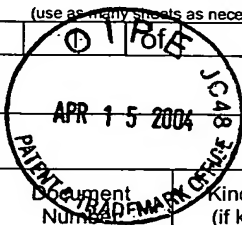
Date April 15, 2004

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Substitute for form 1449A/PTO & 1449B/PTO		<b>Complete if Known</b>	
<b>FIRST INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		<b>Application Number</b>	10/727,660
		<b>Filing Date</b>	December 5, 2003
		<b>First Named Inventor</b>	In-kyu PARK et al
		<b>Examiner Name</b>	Unassigned
		<b>Attorney Docket Number</b>	030681-456
<b>Sheet</b>	2		



U.S. PATENT DOCUMENTS				
Examiner Initials	Document Number	Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Issue/Publication Date (MM-DD-YYYY)

FOREIGN PATENT DOCUMENTS						
Examiner Initials	Document Number	Kind Code (if known)	Country	Date of Publication (MM-DD-YYYY)	Translation	
					Yes	No

NON-PATENT LITERATURE DOCUMENTS	
Examiner Initials	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	DUCK HOON KIM ET AL., "Shape Decomposition Scheme By Combining Mathematical Morphology and Convex Partitioning", The 5 <sup>th</sup> Asian Conference on Computer Vision, 2002, pgs. 1-6, ACCV2002, Melbourne, Australia
	TITUS ZAHARIA ET AL., "3D Shape /Core Experiment: Semantic Versus Geometric Categorization of 3D Mesh Models", International Organisation for Standardisation, ISO/IEC JTC1/SC29/WG11, Coding of Moving Pictures and Audio, MPEG00/M6104, 2000, pgs. 1-10, Geneva, Switzerland
	B.S. MANJUANETH ET AL., "Multimedia Content Description Interface", Introduction to MPEG-7, 2002, pgs. 182-184 and pgs. 236-239, John Wiley & Sons, Ltd., Chichester, West Sussex, England
	IN KYU PARK ET AL., "Perceptual 3D Shape Descriptor: Result of Core Experiment", International Organisation for Standardisation, ISO/IEC JTC1/SC29/WG11, Coding of Moving Pictures and Audio, MPEG2003/M10093, 2002, pgs. 1-9, Brisbane, Australia
	LONGIN JAN LATECKI et al., "Convexity Rule for Shape Decomposition Based on Discrete Contour Evolution", Computer Vision and Image Understanding, 1999, pgs. 441-454, Vol. 73, No. 3, Academic Press, New York, USA
	TITUS ZAHARIA ET AL., "Results of 3D Shape Core Experiment", International Organisation for Standardisation, ISO/IEC JTC1/SC29/WG11, Coding of Moving Pictures and Audio, MPEG00/M6315, 2000, pgs. 1-8, Beijing, China
	JOHAN W.H. TANGELDER ET AL., "Polyhedral Model Retrieval Using Weighted Point Sets", Technical Report UU-CS-2002-019, 2002, pgs. 19, Utrecht University
	PETROS A. MARAGOS ET AL., "Morphological Skelton Representation and Coding of Binary Images", IEEE Transactions on Acoustics Speech, and Signal Processing, 1986, pgs. 1228-1244, Vol. 34, No. 5
	IN-KYU PARK ET AL., "Perceptual 3D Shape Descriptor: Result of Core Experiment", International Organisation for Standardisation, ISO/IEC JTC1/SC29/WG11, Coding of Moving Pictures and audio, MPEG2003/M9809, 2003, pgs. 1-9, Trondheim, Norway
	KALEEM SIDDIQI ET AL., "Shock Graphs and Shape Matching", International Journal of Computer Vision, 1999, pgs. 13-32, Kluwer Academic Publishers, Netherlands
	IOANNIS PITAS ET AL., "Morphological Shape Decomposition", IEE Transactions on pattern Analysis and Machine Intelligence, 1990, pgs. 38-45, Vol. 12, No. 1, IEEE

<b>Examiner Signature</b>	<b>Date Considered</b>
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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		<b>Examiner Name</b>	Unassigned
		<b>Attorney Docket Number</b>	030681-456
Sheet	2		

APR 15 2004		<b>NON-PATENT LITERATURE DOCUMENTS</b>	
Examiner Initials	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		
	YOSHIKAZU ET AL., "The Earth Mover's Distance as a Metric for Image Retrieval", International Journal of Computer Vision, 2000, pgs. 99-121, Kluwer Academic Publishers, The Netherlands		
	LESZEK CIEPLINSKI ET AL., "MPEG-7 Visual Part of Experimentation Model Version 11.0", International Organisation for Standardisation, ISO/IEC JTC1/SC29/WG11/N4362, Coding of Moving Pictures and Associated Audio Information, 2001, pgs. 1-91, Sydney, Australia		

Examiner Signature		Date Considered	
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VA 117657.1